

Amendments to the Claims:

1-6 (Canceled).

7 (Currently amended): A computer-implemented method for communicating between a client and a plurality of search engines in a distributed processing system, comprising the steps of:

providing a search engine manager having a client interface configured to allow the search engine manager to communicate with the client, a query generation module configured to receive a search query from the client interface and to generate a standard query, and a wrapper interface configured to provide the standard query to a search engine wrapper;

providing a the search engine wrapper having a manager interface configured to provide standardized communication between the search engine manager and the search engine wrapper, a query translation module configured to translate the standard query received from the search engine manager into the a native format query associated with the a registered search engine, and a search engine interface configured to allow the search engine wrapper to communicate with the registered search engine in the native format of the registered search engine, wherein the search engine wrapper includes a wrapper ID, wherein the search engine wrapper presents the wrapper ID to a search engine store to identify the search engine wrapper during a registration process;

discovering the search engine registered with a search system by accessing the search engine store and identifying the search engine wrapper ID associated with the registered search engine;

receiving a the search query, at a the search engine manager, having a plurality of search parameters, the search query being generated by a search client;

building a the standard query from the search query, wherein the standard query is universally configured to be understandable by a plurality of search engine wrappers;

issuing the standard query to each of the plurality of search engine wrappers;

receiving the standard query at each of the plurality of search engine wrappers;

at each of the plurality of search engine wrappers, translating the standard query to the a native format query for a the search engine associated with the search engine wrapper, wherein

the native format query is unique to the search engine associated with the search engine wrapper;
and

issuing, from each of the search engine wrappers, the unique native format query to the search engine associate with the search engine wrapper.

8 (Currently amended): The method of claim 7, wherein each search engine wrapper is configured to issue a progress update and a the wrapper ID to the search engine manager.

9 (Original): The method of claim 7, wherein the search engine manager is configured to disable issuing the standard query to a selected search engine wrapper in accordance with the search query.

10 (Currently amended): The method of claim 7, wherein issuing the standard query to ~~each of the plurality of~~ search engine wrappers is facilitated by a standardized interface.

11 (Original): The method of claim 10, wherein the standardized interface includes a COM (component object model) interface.

12 (Currently amended): The method of claim 11, wherein ~~each of the plurality of~~ the search engine wrappers ~~are~~ is registered with the search engine manager to provide searching capabilities.

13 (Currently amended): A computer-readable storage medium having computer-executable instructions for performing steps, comprising:

providing a search engine manager having a client interface configured to allow the search engine manager to communicate with ~~the~~ a client, a query generation module configured to receive a search query from the client interface and to generate a standard query, and a wrapper interface configured to provide the standard query to a search engine wrapper;

providing a plurality of search engine wrappers having a manager interface configured to provide standardized communication between the search engine manager and the search engine wrappers, a query translation module configured to translate the standard query received from the search engine manager into ~~the a~~ native format query associated with ~~the a~~ registered search engine, and a search engine interface configured to allow the search engine wrappers to communicate with the registered search engine in the native format of the registered search engine, wherein the plurality of search engine wrappers include wrapper IDs, wherein the plurality of search engine wrappers present the wrapper IDs to a search engine store to identify each of the search engine wrappers during a registration process;

registering a search engine with the search engine manager to provide searching capabilities, wherein registering includes storing a search engine wrapper ID associated with the registered search engine;

receiving, at the search engine manager, ~~a client~~ the search query from ~~a the~~ client;
building a the standard query from the ~~client search~~ query received from the client,
wherein the standard query is universally formatted for the search engine wrappers;

passing the standard query from the search engine manager to the plurality of search engine wrappers, wherein each of the plurality of search engine wrappers is associated with a different registered search engine;

translating, at each of the search engine wrappers, the standard query to a translated query in a the native format of the registered search engine associated with the search engine wrapper, wherein each of the search engine wrappers translates the standard query into a different native format;

transmitting the translated query to the registered search engine; and
receiving results of the translated query from the registered search engine.

14 (Previously presented): The computer-readable storage medium of claim 13, wherein registering the search engine further comprises registering an associated search engine wrapper with a common registration service.

15 (Currently amended): The computer-readable storage medium of claim 14, wherein registering the associated search engine wrapper further comprises storing a the wrapper ID which uniquely identifies the associated search engine wrapper, and storing other information, in a database associated with the common registration service.

16 (Previously presented): The computer-readable storage medium of claim 13, wherein passing the standard query from the search engine manager is performed through a standardized interface allowing for a multiplicity of search engine wrappers associated with other search engines to receive the standard query.

17 (Previously presented): The computer-readable storage medium of claim 15, wherein the standardized interface includes a COM (Component Object Model) interface.

18 (Currently amended): The computer-readable storage medium of claim 13, wherein building the standard query further comprises combining, by a the query generation module, the client query with other parameters received from the client.

19 (Currently amended): The computer-readable storage medium of claim 13, wherein translating the standard query further comprises transforming the standard query to the native format of the search engine through the use of a the translation module.

20 (Previously presented): The computer-readable storage medium of claim 13, wherein receiving the results further comprises enumerating the results, returning the wrapper ID to the search engine manager, and returning progress updates to the manager until the results are returned.

21 (Currently amended): A computer-readable storage medium having computer-executable instructions for performing steps, comprising:
providing a search engine manager having a client interface configured to allow the search engine manager to communicate with the client, a query generation module configured to

receive a search query from the client interface and to generate a standard query, and a wrapper interface configured to provide the standard query to a search engine wrapper;

providing at least one search engine wrapper having a manager interface configured to provide standardized communication between the search engine manager and the search engine wrapper, a query translation module configured to translate the standard query received from the search engine manager into ~~the~~ a native format query associated with ~~the~~ a registered search engine, and a search engine interface configured to allow the search engine wrapper to communicate with the registered search engine in the native format of the registered search engine, wherein the at least one search engine wrapper includes a wrapper ID, wherein the search engine wrapper presents the wrapper ID to a search engine store to identify the wrapper during a registration process;

discovering at least one search engine registered with a search system by accessing the search engine store and identifying at least one search engine wrapper ID associated with the at least one search engine;

receiving a query initiated by a the client accessing the search system;

building a the standard query from the query initiated by the client, wherein the standard query is universally configured to be understandable by a plurality of engine wrappers;

transmitting the standard query to a the plurality of search engine wrappers, wherein each search engine wrapper is configured to translate the search query into a the native format that is unique to a the search engine registered with the search engine wrapper;

requesting a response from each of the search engine wrappers the response including a progress update for the standard query as it is executed and the results of the standard query; and receiving responses from each of the search engine wrappers.

22 (Currently amended): The computer-readable storage medium of claim 21, wherein discovering a the search engine registered with the search system further comprises accessing a the search engine store to retrieve identification information for the at least one search engine registered with the search system.

23 (Currently amended): The computer-readable storage medium of claim 21, wherein receiving the query initiated by a the client further comprises receiving the query through a COM interface.

24 (Previously presented): The computer-readable storage medium of claim 21, wherein building the standard query further comprises using a query generation module.

25 (Previously presented): The computer-readable storage medium of claim 21, wherein transmitting the standard query further comprises not transmitting the standard query to a search engine wrapper that is excluded by the client.

26 (Previously presented): The computer-readable storage medium of claim 21, wherein the response received indicates that the standard query is complete.

27 (Previously presented): The computer-readable storage medium of claim 21, wherein the response received indicates that the standard query failed because a time limit for receiving a response is exceeded.

28 (Currently amended): The computer-readable storage medium of claim 21, wherein the response indicates that the standard query is incomplete because the at least one search engine associated with the at least one search engine wrapper is not finished with its associated native format query.

29-36 (Cancelled).

37 (New): A system, comprising:
a processor;

a memory having computer-executable instructions stored thereon, wherein the computer executable instructions are configured for:

providing a search engine manager having a client interface configured to allow the search engine manager to communicate with the client, a query generation module configured to receive a search query from the client interface and to generate a standard query, and a wrapper interface configured to provide the standard query to a search engine wrapper;

providing at least one search engine wrapper having a manager interface configured to provide standardized communication between the search engine manager and the search engine wrapper, a query translation module configured to translate the standard query received from the search engine manager into a native format query associated with a registered search engine, and a search engine interface configured to allow the search engine wrapper to communicate with the registered search engine in the native format of the registered search engine, wherein the at least one search engine wrapper includes a wrapper ID, wherein the search engine wrapper presents the wrapper ID to a search engine store to identify the wrapper during a registration process;

discovering at least one search engine registered with a search system by accessing the search engine store and identifying at least one search engine wrapper ID associated with the at least one search engine;

receiving a query initiated by a the client accessing the search system;

building the standard query from the query initiated by the client, wherein the standard query is universally configured to be understandable by a plurality of engine wrappers;

transmitting the standard query to the plurality of search engine wrappers, wherein each search engine wrapper is configured to translate the search query into the native format that is unique to the search engine registered with the search engine wrapper; and

issuing, from each of the search engine wrappers, the unique native format query to the search engine associate with the search engine wrapper.

38 (New): The system of claim 37, wherein each search engine wrapper is configured to issue a progress update and the wrapper ID to the search engine manager.

39 (New): The system of claim 37, wherein the search engine manager is configured to disable issuing the standard query to a selected search engine wrapper in accordance with the search query.

40 (New): The system of claim 37, wherein issuing the standard query to search engine wrapper is facilitated by a standardized interface.

41 (New): The system of claim 40, wherein the standardized interface includes a COM (component object model) interface.

42 (New): The system of claim 37, wherein the search engine wrapper is registered with the search engine manager to provide searching capabilities.